

## **Quick Install Guide**

# Wireless 54Mbps A+G Dualband Access Point with built-in PoE

NetPassage WP18



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Chapter 1 Introduction

### 1: Introduction

Compex WP18 Wireless 54Mbps A+G Dualband Access Point with built-in PoE let you have the best of both worlds with its versatile Dualband feature. Compex WP18 contains two separate wireless radio transceivers that support all three popular wireless network such as the IEEE 802.11b/g band which operates on 2.4GHz and the IEEE 802.11a band which operates at 5GHz. As the two transceivers operate in different bands, they can work simultaneously; providing a larger coverage zone with high-speed connectivity for your wireless network. The autoscan feature automatically sense the clearer network to connect to, ensuring better and faster connectivity at all times. Besides functioning as a versatile access point for hotspot or any public access deployment, WP18 can also function as an Access Point Client in any wireless network environment. The in-built Atheros-AG technology provides higher throughput at 802.11a, 5GHz vs 802.11g's congested 2.4GHz band and the ability to operate in 24 non-overlapping channels as compared to the 3 non-overlapping channels on the 802.11g standard.

Compex WP18 also includes an integrated Power over Ethernet (PoE) that allows WP18 to be used in areas where power outlets are not readily available.

To protect your security and privacy, Compex WP18 is armed with many enhanced wireless security features such as Wi-Fi Protected Access (WPA), WPA2, IEEE 802.1x Authentication and 64-bit/128-bit WEP (Wired Equivalent Privacy) and Pseudo VLAN to ensure privacy for the heterogeneous mix of users within the same wireless LAN, while maintaining full access to the establishment's resources. Compex WP18 also incorporates a DHCP server that allows easy connection to any network.

Chapter 1 Introduction

### **Packaging Content**

Actual product appearance may slightly differ depending on the hardware version.



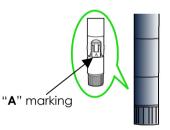
### 2: Let's Get Going-Hardware Setup

Compex WP18 can be powered using either the power adapter or the Compex PoE or IEEE802.3af PoE. The installation process for the three options is described below.

### Option One: Using power adapter to supply power to the unit



Before attaching a pair of external antennas to Compex WP18 correctly, please carefully take note of the "A" marking on one of these two antennas as the Dual-band "AG" Antenna



No "A" marking means that the other antenna is Single-band "G" Antenna.



Connect

this

the

dual-band

LEFT on

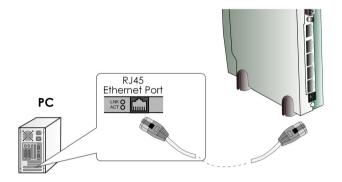
Connect this single-band **"G**" to the RIGHT Compex WP18.



Important to Note: To ensure that Compex WP18 is working well, these two antennas MUST NOT be swapped.

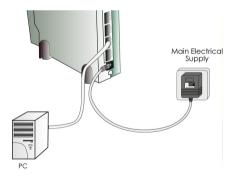


Insert one end of the RJ45 Ethernet cable to any of the LAN ports (1,2 or 3) on your Compex WP18, and the other end of the cable to your PC's Ethernet network adapter.



### Step 3

Attach the power adapter to the main electrical supply, and connect the power plug into the socket of the Compex WP18.



Power ON your PC. Notice that the **Power** and Port **1** or **2** (depending on which port you have connected the RJ45 Ethernet cable to) LEDs have lighted up. This indicates that the connection has been established successfully between your Compex WP18 and your PC.

### Option Two: Using Compex PoE to supply power to the unit

Compex Power-Over-Ethernet (PoE) is fully compatible with your Compex WP18. This accessory supplies operational power to the wireless access point via the Ethernet cable connection.

Users who have already purchased the Compex PoE and who wish to use it to supply power to the Compex WP18 may follow the installation procedures as shown below:

### Step 1

Follow the same procedure as described in the **Option One**. And also refer to Appendix C (in user's manual) for configuring the jumper JP01 before proceeding to Step 2.

### Step 2

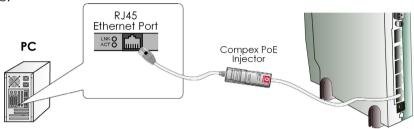
Use an RJ45 Ethernet cable to connect one end of the cable to the Ethernet socket of the Injector and the other end to the **Port 4** (PoE Port) of Compex WP18.



For Compex PoE, the recommended length of the RJ45 Category 5 cable is up to 50 metres.

Next, connect the RJ45 Ethernet cable attached to the Compex PoE Injector to your PC's Ethernet network adapter.

Once you have finished configuring your WP18, you can connect the PoE Injector's RJ45 Ethernet cable to your network device, such as to a switch or hub.

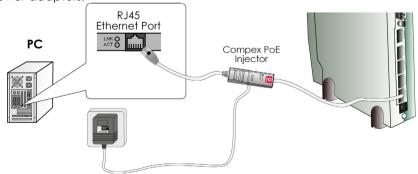


### Step 4

Connect the power adapter supplied in the Compex PoE kit to the main electrical supply and the power plug into the socket of the injector.

#### Note:

The voltage and current supplied to the Compex WP18 power adapter and the Compex PoE kit power adapter are different. Do not interchange the power adapters.



Now, turn on your power supply. Notice that the **Power** and **Port 4** (PoE Port) (according to the picture illustration) LEDs have lighted up. This indicates that the WP18 is receiving power through the Compex PoE Injector and that connection between Compex WP18 and your PC has been established.

# Option Three: Using IEEE 802.3af PoE Injector to supply power to the unit

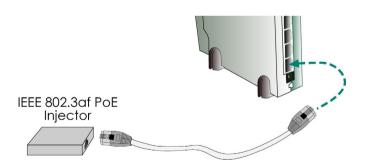
Compex WP18 can be powered using the IEEE802.3af PoE Injector. This accessory supplies operational power to the wireless AP via the Ethernet cable connection. The installation process is described below.

### Step 1

Follow the same procedure as described in the **Option One**. And also refer to Appendix C ( in user's manual) for configuring the jumper JP01 before proceeding to Step 2.

### Step 2

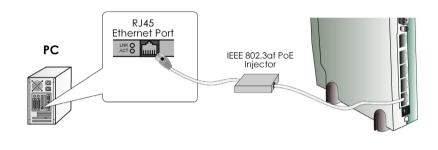
Use an RJ45 Ethernet cable to connect one end of the cable to the Ethernet socket of the Injector and the other end to the **Port 4** (PoE Port) of Compex WP18.



Maximum length of the RJ45 Category 5 cable is 100 metres.

Next, connect the RJ45 Ethernet cable attached to the standard PoE Injector to your PC's Ethernet network adapter.

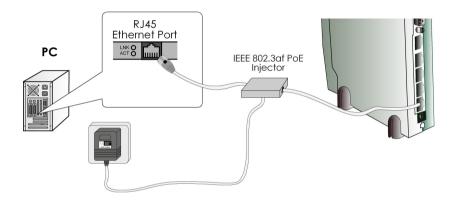
Once you have finished configuring your WP18, you can connect the PoE Injector's RJ45 Ethernet cable to your network device, such as to a switch or hub.



Connect the power adapter supplied in the IEEE802.3af PoE kit to the main electrical supply and the power plug into the socket of the injector.

#### Note:

The voltage and current supplied to the NetPassage WP18 power adapter and the standard PoE kit power adapter are different. Do not interchange the power adapters.



### Step 5

Now, turn on your power supply. Notice that the **Power** and **Port 4** (PoE Port) (according to the picture illustration) LEDs have lighted up. This indicates that the WP18 is receiving power through the PoE Injector and that connection between NetPassage WP18 and your PC has been established.

### 3: Access to Web-based Interface

There are two methods to access to the web-based interface of Compex NetPassage WP18:

#### 1. Through the Compex Utility - uConfig

You can access to the web-based interface directly without having to change the IP address of your PC.

#### 2. Through your web browser

First, you will need to assign an IP address to your PC, such as 192.168.168.xxx, where x can be any value from 2 to 254, so that it is in the same subnet as Compex WP18. Then, enter IP address of Compex WP18 in the address bar of Internet Explorer and press **Enter**.

### Access to the Web interface with uConfig

Compex has developed a powerful uConfig utility that provides hassle-free access to the web-based configuration page.

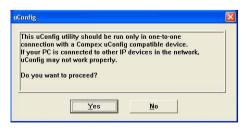


Insert the Product CD into your CD-ROM drive.

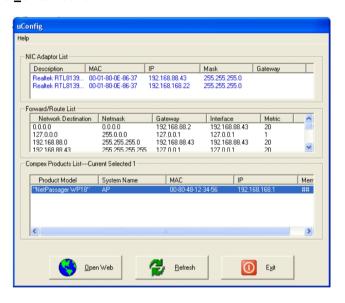
### Step 2

From the **Utilities** section, select to install the **uConfig** utility to your hard disk.

When the utility has been installed, double-click on the **uConfig** icon. The following screen will appear, click on the **Yes** button to proceed.



Select **NetPassage WP18** in the **Compex Products List** section and click on **Open Web** button. To update and display the available device(s) in the list, click on the **Refresh** button.



This screen prompts you not to exit your uConfig program while accessing to your web-based interface, or else you will fail to connect to your device. Click on the **OK** button to proceed.

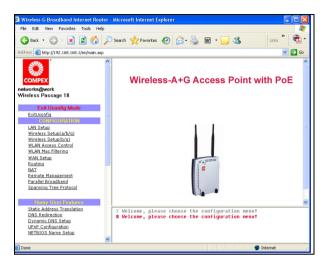


### Step 5

At the authentication page, click on the **LOGIN!** button to enter the main configuration page. The default password is "password".



You will then reach the home page of Compex WP18's web-based interface.



#### Note:

Refer to User's Manual for instructions on how to configure Compex WP18 for wireless access.

### Access to the Web interface manually

If you wish to access to the web interface manually, you need to configure the TCP/IP of your PC. Refer to Chapter 4 for detail.

If you have forgotten the IP address of your access point, do not worry! Compex has designed another utility program **NpFind** that helps you verify the IP address of your Compex product. You can also find this utility in the Product CD.

From the Product CD, click on **Utilities** and select **NpFind** program to run it.

Once your Compex WP18 has connected to your PC, the program will automatically detect the device and display its IP address.



### Step 2

Open your Internet browser, enter http://192.168.168.1 in the address bar and hit the **Enter** key from the keyboard.



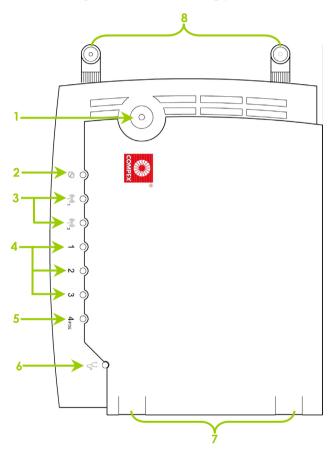
You will then reach the home page of Compex WP18's web-based interface.

#### Note:

Refer to User's Manual for instructions on how to configure Compex WP18 for wireless access.

## 4: Panel Views and Descriptions

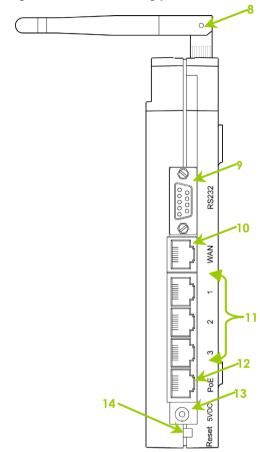
### Front View of NetPassage WP18 in the standing position



	Name	Description			
1	Power (LED)	Steady Green	The device is powered up.		
		Off	No power is supplied to the device.		

2	WAN (Link/Activity	Steady Green	The WAN connection is enabled.		
	LED)	Flashing Green	Data transmission at WAN connection.		
3	WLAN (1),(2) (Link/Activity LED)	Steady Green	At least one wireless link is present.		
		Flashing Green	Activity is detected in the wireless network.		
4	1,2,3 (Link/Activity/Speed LEDs)	These LEDs reflect the status of the integrated Fast Ethernet Switch.			
	,	Steady Green	There is a connectivity link of 100Mbps.		
		Flashing Green	100Mbps data transmission is detected at the port concerned.		
		Steady Amber	There is a connectivity link of 10Mbps.		
		Flashing Amber	10Mbps data transmission is detected at the port concerned.		
5	4POE (LED)	This LED is lighted up when the Compex PoE Injector or 1EEE 802.3af PoE Injector is used.			
6	DIAG (LED)	This LED is reserved for diagnostic purposes			
7	Rest Feet	These feet hold and support the NetPassage WP18 in the standing position.			

### Side View of NetPassage WP18 in the standing position



		Name	Description
	8	External Antennas	2dBi SMA antennas
	9	R232 (Integrated Serial Interface)	This interface is used for accessing the Hyper Terminal console to configure the NetPassage WP18.
1	10	WAN (RJ45 Port)	10/100Base-T Port connects to Cable/ADSL modem.

11	1, 2, 3 (Ethernet Ports)	Integrated 3-port 10/100Mbps Switching (RJ45)
12	4 POE (POE POrt )	If using power adapter: Connect to your PC or network hub or switch  If using PoE: Connect to PoE injector
13	5V DC (DC Input)	5V DC power input
14	Reset (Push Button)	To reboot, press once.  To reset password, press and hold the button for 5 seconds. The DIAG LED will flash fast for about 5 flashes/sec before releasing the button.  To restore the factory default settings, press and hold the button for more than 10 seconds. The DIAG LED will flash slowly for about 10 flashes/sec before releasing the button.

# 5: Technical Specifications

Safety and Electromagnetic Conformance	<ul> <li>FCC Part 15 SubPart B and SubPart C [for wireless module]</li> <li>EN 300 328-2 [for wireless module]</li> <li>EMC CE EN 301 489 (EN300 826) [for wireless module]</li> <li>EN 55022 (CISPR 22)/EN 55024 Class B</li> <li>EN 61000-3-2</li> <li>EN61000-3-3</li> <li>CE EN 60950</li> </ul>
Standards	<ul> <li>IEEE 802.11a         <ul> <li>54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps, 1Mbps</li> </ul> </li> <li>IEEE 802.11b         <ul> <li>11Mbps, 5.5Mbps, 2Mbps, 1Mbps</li> </ul> </li> <li>IEEE 802.11g         <ul> <li>54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps, 1Mbps</li> </ul> </li> </ul>
Frequency Range  IEEE 802.11a: IEEE 802.11b: IEEE 802.11g:	2.4 ~ 2.4835 GHz

Network Interface	WAN Interface:
	1 x 10/100 Mbps
	·
	LAN Interface:
	3 x 10/100 Mbps
	Power over Ethernet :
	1 x PoE
Security	• 64 - bit / 128 – bit WEP
	WPA-EAP and WPA-PSK
	Wireless Pseudo Virtual LAN     The The Pseudo
	IEEE 802.1x – TLS, TTLS, PEAP, EAP-SIM     Stateful Packet Increasing Firewall
	Stateful Packet Inspection Firewall
Output Power	
IEEE 802.11a:	20 dBm
IEEE 802.11b:	20 dBm
IEEE 802.11g:	20 dBm
Managamant	CNIAAD Wab browser uConfig
Management	SNMP, Web browser, uConfig
Advanced Features	Long Range Parameter Settings (LDA)
	Universal Plug-N-Play
	Dynamic DNS Service (Subscribe service)
Resiliency	Parallel Broadband
	T didie Diedaband
Profile Backup & Restore	Yes
Firmware Upgrade	Yes
Power Requirements	
Using Power Adapter:	Output 5VDC (localized to country of sale)
Using PoE:	Compex PoE Injector or IEEE 802.3af Injector
Certifications	• FCC
	CE Mark
	Gost
	C-tick N 12030
Environment Requirements	
Operating Temp:	0°C to 55°C
Storage Temp:	-20°C to 75°C
	<u>,                                      </u>

Operating Temp:	0°C to 55°C
Storage Temp:	-20°C to 75°C
Operating Humidity:	10% to 80% RH
	Humidity (RH – Relative Humidity):

#### **Further Information References**

For more details on the NetPassage WP18 configuration, please refer to the User's Manual in the accompanying Product CD.

This document may become superseded, in which case you may find its latest version at: <a href="http://www.compex.com.sg">http://www.compex.com.sg</a>

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Manual Revision by Ann

Manual Number: M-0508-V1.1C Version 1.1, September 2005

FCC NOTICE: This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Increase the separation between the computer and receiver.
- Consult the dealer or an experienced radio / TV technician for help.

**Caution:** Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

**FCC Compliance Statement:** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Products that contain a radio transmitter are labeled with FCC ID and may also carry the FCC loao.

Caution: Exposure to Radio Frequency Radiation.

To comply with the FCC RF exposure compliance requirements, the following antenna installation and device operating configurations must be satisfied:

- a. For configurations using the integral antenna, the separation distance between the antenna(s) and any person's body (including hands, wrists, feet and ankles) must be
- b. at least 2.5cm (1 inch).
  - For configurations using an approved external antenna, the separation distance between the antenna and any person's body (including hands, wrists, feet and ankles) must be at least 20cm (8 inch).

The transmitter shall not be collocated with other transmitters or antennas.

#### **ICES 003 Statement**

This Class B digital apparatus complies with Canadian ICES-003.

#### DECLARATION OF CONFORMITY: Compex, Inc. declares that the product:

Product Name: Compex Wireless 54Mbps A+G Access Point with built-in PoE

Model No.: NetPassage WP18 conforms to the following Product Standards:

This device complies with the Electromagnetic Compatibility Directive (89/336/EEC) issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards.)

Electromagnetic Interference (Conduction and Radiation): EN 55022 (CISPR 22)

**Electromagnetic Immunity**: EN 55024 (IEC61000-4-2,3,4,5,6,8,11)

Low Voltage Directive: EN 60 950: 1992+A1: 1993+A2: 1993+A3: 1995+A4: 1996+A11:1997.

**Therefore, this product is in conformity with the following regional standards: FCC Class B:** following the provisions of FCC Part 15 directive; **CE Mark:** following the provisions of the EC directive.

#### **DECLARATION OF CONFORMITY: Compex, Inc. declares that:**

The wireless card in this product complies with the R&TTE Directive (1999/5/EC) issued by the Commission of the European Community. Compliance with this directive implies conformity to the following:

**EMC Standards:** FCC: 47 CFR Part 15, Subpart B, 47 CFR Part 15, Subpart C (Section 15.247); CE: EN 300 328-2, EN 300 826 (EN 301 489-17)

Therefore, this product is in conformity with the following regional standards: FCC Class B: following the provisions of FCC Part 15 directive; CE Mark: following the provisions of the EC directive.

Manufacturer's Name: Compex Systems Pte Ltd

Address: 135 Joo Seng Road, PM Industrial Building, #08-01, Singapore 368363

#### WARRANTY REGISTRATION CARD

Register via the Internet at http://www.cpx.com or http://www.compex.com.sg

[M-0088-V2.4C]



To activate the warranty, please complete this card and return to Compex within ninety (90) days from the date of purchase.

Please e-mail this warranty card to **support@compex.com.sg**.

Product:	Purchase Date:	Model:		Serial No:	
Name:			E-mail:		
Company:	Company:				
Address:					
Postal/Zip Code:			Country:		
Phone: (	)				

#### Note:

For purchases within U.S.A and Canada, please fax to Compex, Inc. at (714) 482 0332

For purchases outside U.S.A and Canada, please fax to Compex Systems Pte Ltd at (65) 6280-9947

Manual Number: M-0508-V1.1C Version 1.1 September 2005

